

An aerial photograph of a suburban neighborhood in Los Altos, CA. The image shows a grid of residential streets with houses and trees. A large, rectangular area in the center-right is highlighted with a yellow box, indicating the location of the Los Altos Hill View Community Center. A smaller yellow box is also visible to the left of the main highlighted area.

# LOS ALTOS HILL VIEW COMMUNITY CENTER

## LOS ALTOS, CA

**NOLL & TAM ARCHITECTS**

**JANET TAM**

PRINCIPAL IN CHARGE

**JAMES GWISE**

PROJECT MANAGER

**TRINA GOODWIN**

INTERIOR ARCHITECT

**MIG**

**JAN EIESLAND**

LANDSCAPE ARCHITECT

**CITY COUNCIL MEETING**

September 11, 2018



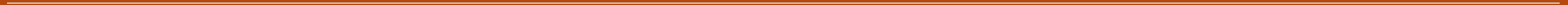
# AGENDA

## REVIEW OF 100% DESIGN DEVELOPMENT

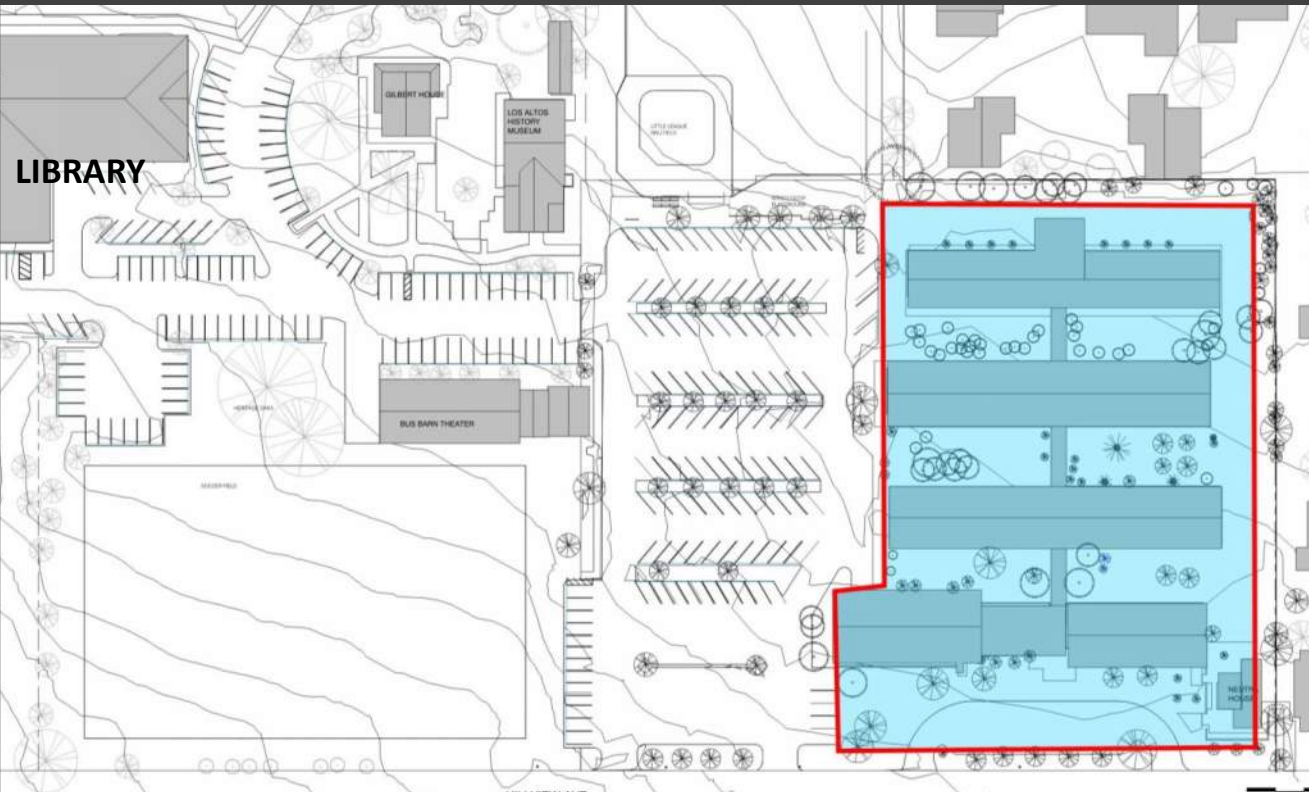
- Agency Reviews & Comments
  - Landscape Design
  - Exterior Character & Materials
  - Interior Design
  - Other building features
-

**DESIGN DEVELOPMENT**

**100% COMPLETE**



# SITE EVOLUTION SD to DD



## ORIGINAL SITE

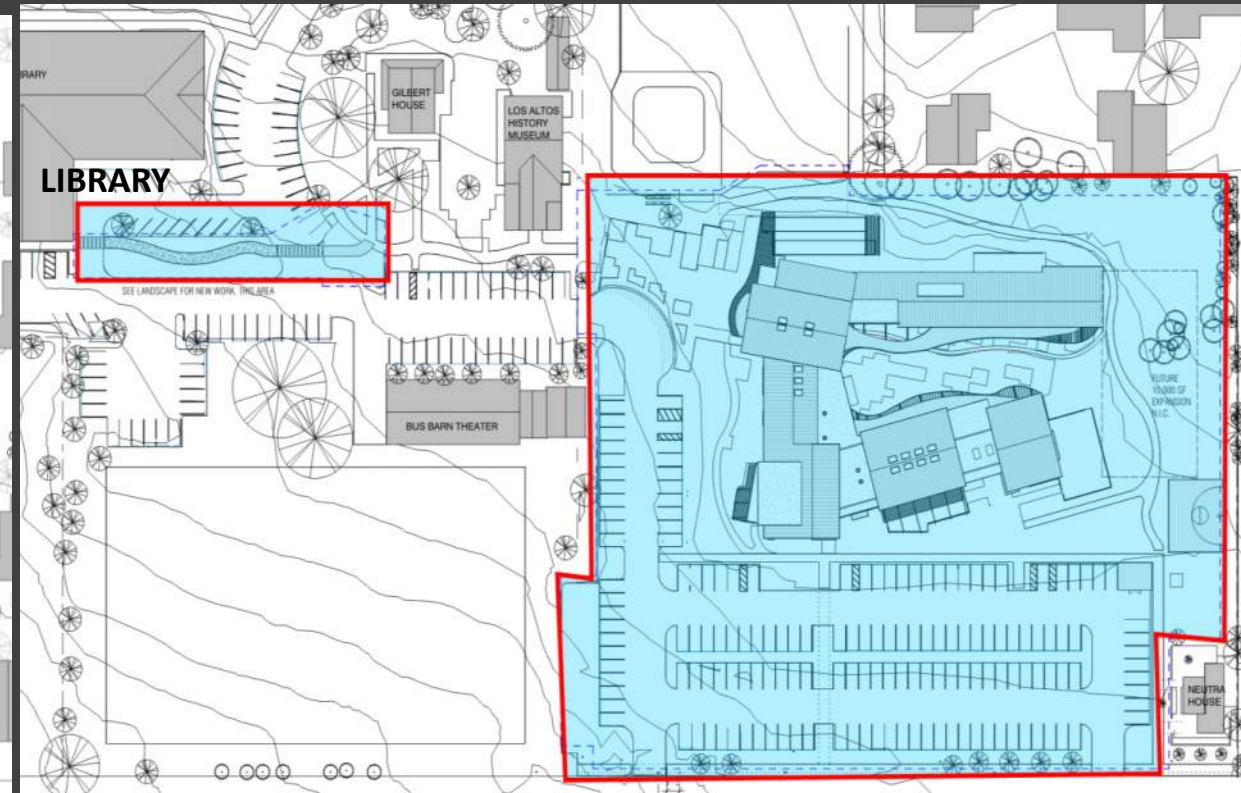
110,000 sf site

EXISTING PARKING

COMMUNITY CENTER = 145

AFFECTED LIBRARY SPACES = 15

TOTAL = 160



## RENOVATED SITE

198,000 sf site

NEW PARKING

COMMUNITY CENTER = 145+15

AFFECTED LIBRARY SPACES = (-15)

TOTAL = 160

# AGENCY REVIEW COMMENTS

## 6/27 COMPLETE STREETS COMMISSION COMMENTS

1. RE EVALUATE RIBBON BIKE RACKS
2. WIDER EASTERN WALKING PATH
3. MINIMIZE REDUCTION OF LIBRARY PARKING @ NEW PEDESTRIAN CONNECTOR
4. REVIEW DROP OFF TO PREVENT U-TURNS AND IMPROVE TRAFFIC PATTERNS

## 7/10 CITY COUNCIL DIRECTION

### IN ADDITION TO COMPLETE STREETS COMMENTS:

5. DESIGN FOR PV PANELS
  6. CHANGE ROOF MATERIALS TO COMPOSITION SHINGLES FROM METAL
-

# AGENCY REVIEW COMMENTS

## 8/2 PLANNING COMMISSION REVIEW

### 7. HIGHER QUALITY OF MATERIALS

- Less stucco

- Attention to Window detailing

- Reconsider Metal standing seam roofing

### 8. NORTH BAR MORE VISUAL INTEREST

### 9. LANDSCAPE COMMENTS

- Character of trees- deciduous /non-deciduous

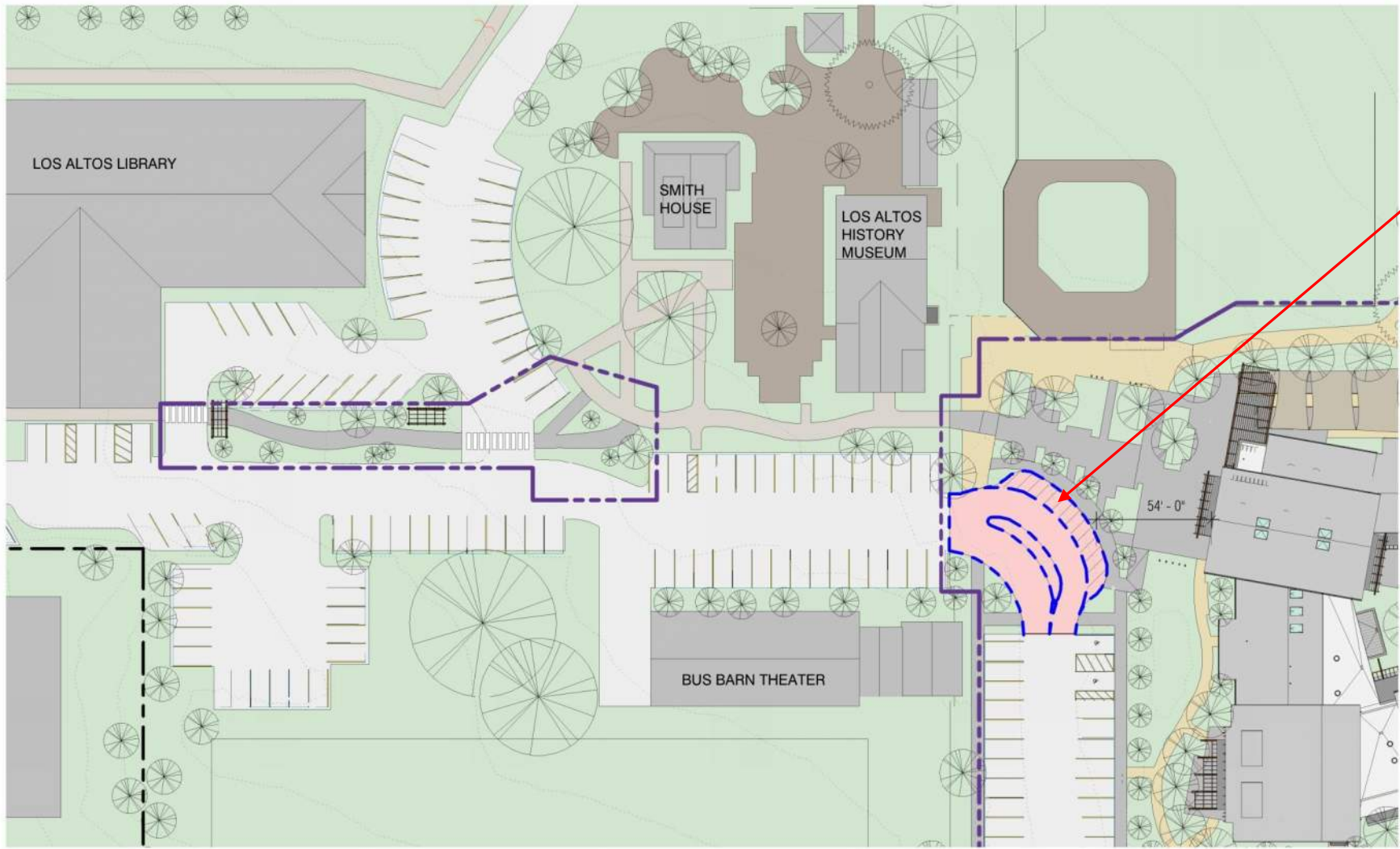
- Character of courtyard paving

- Ginko Trees (slow growth, and messy)

### 10. CHARACTER OF PEDESTRIAN CONNECTOR

---

RECOMMENDED DROP OFF 3



MINIMAL  
IMPACT  
ON PLAZA



NEW  
COMMUNITY  
CENTER

HILLVIEW  
AVE

LITTLE LEAGUE  
BALLFIELD

SOCCER  
FIELD

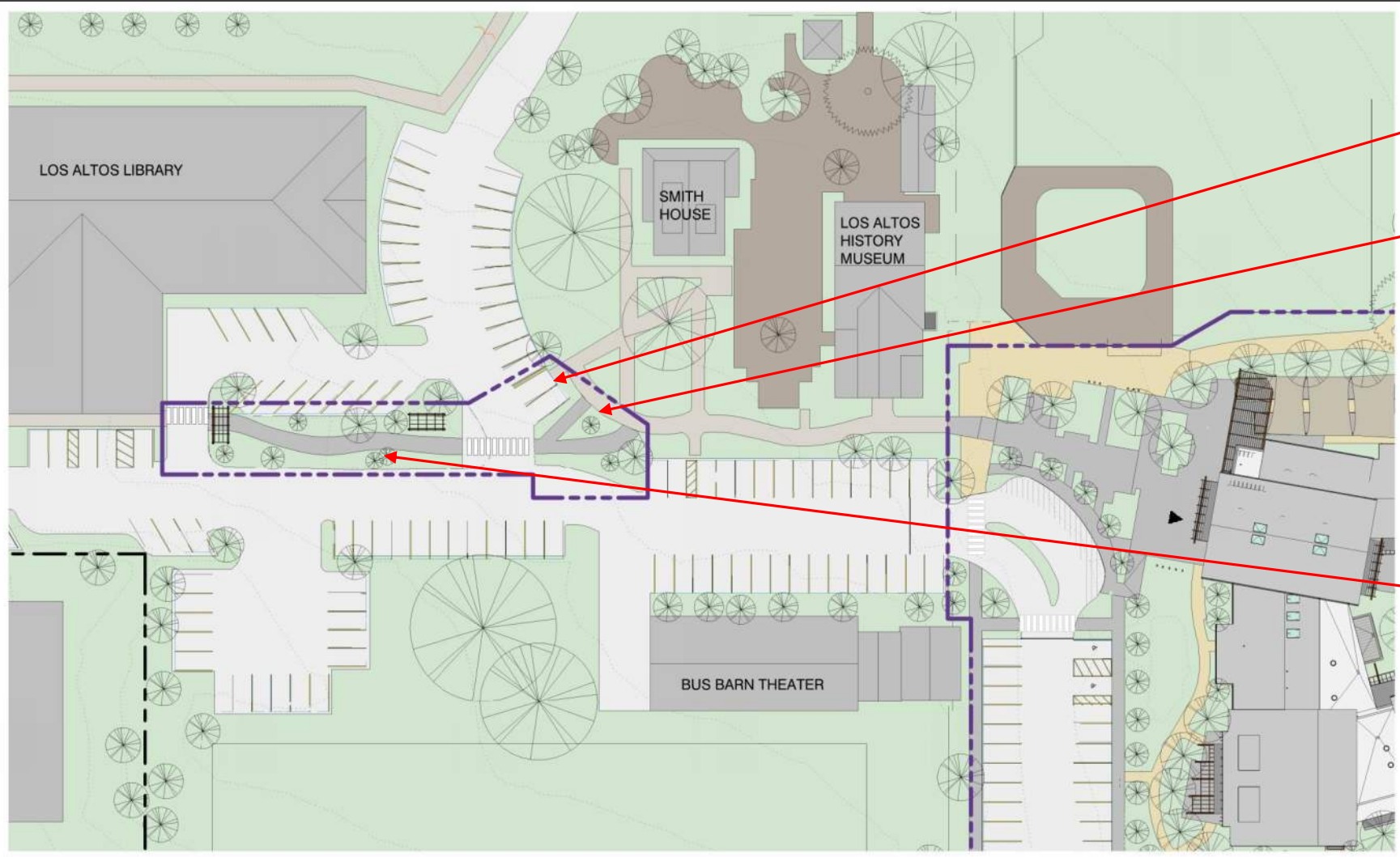
HISTORY  
MUSEUM

AERIAL VIEW FROM ABOVE @ LIBRARY





# RECOMMENDED CONNECTOR DESIGN



1 SPACE ADDED

4 SPACES RELOCATED  
TO PARKING LOT

11 SPACES RELOCATED TO  
PARKING LOT

SUMMARY OF COMMUNITY CENTER  
AND LIBRARY PARKING:

145 EXISTING CONDITION CC SITE  
15 EXISTING LIBRARY  
160 TOTAL EXISTING AND PROVIDED

# BIKE RACKS





# 100% DESIGN DEVELOPMENT SITE PLAN







PEDESTRIAN CONNECTION





PEDESTRIAN CONNECTION



# 100% DD LANDSCAPE PLAN





# 100% DD LANDSCAPE TREES



*Ginkgo biloba* 'Autumn Gold'  
Maidenhair Tree  
25-50' h x 25-35' w  
Slow to moderate growth



*Lagerstroemia indica* x *fauriei* 'Natchez'  
Natchez Crape Myrtle  
20-25' h x 12' w  
Fast growth



*Olea europaea* 'Swan Hill'  
Swan Hill Olive  
20-30' h x 20-30' w  
Slow to moderate growth





# 100% DD LANDSCAPE TREES



*Acer rubrum* 'Red Sunset'  
Red Sunset Maple  
40-50' h x 30-35' w  
Fast growth



*Cercis occidentalis*  
Western Redbud  
10-18' h x 10-18' w  
Moderate growth



*Pistacia chinensis*  
Chinese Pistache  
35-40' h x 25-40' w  
Moderate growth



*Acer palmatum* 'Bloodgood'  
Bloodgood Japanese Maple  
12-15' h x 12-15' w  
Moderate growth



*Acer palmatum* 'Osazuki'  
Japanese Maple  
20-25' h x 15-20' w  
Moderate growth



*Acer palmatum* 'Sango Kaku'  
Coral Bark Maple  
15-20' h x 15-20' w  
Moderate growth



*Pinus thunbergii*  
Japanese Black Pine  
30-50' h x 20-30' w  
Moderate to fast growth





# 100% DD LANDSCAPE TREES



- DECIDUOUS
- EVERGREEN

# PLANTING CHARACTER

## ORNAMENTAL PLANTING CHARACTER



34,671 sf



## BIORETENTION PLANTING CHARACTER



5,301 sf



## HYDROSEED NATIVE GRASSES



13,227 sf

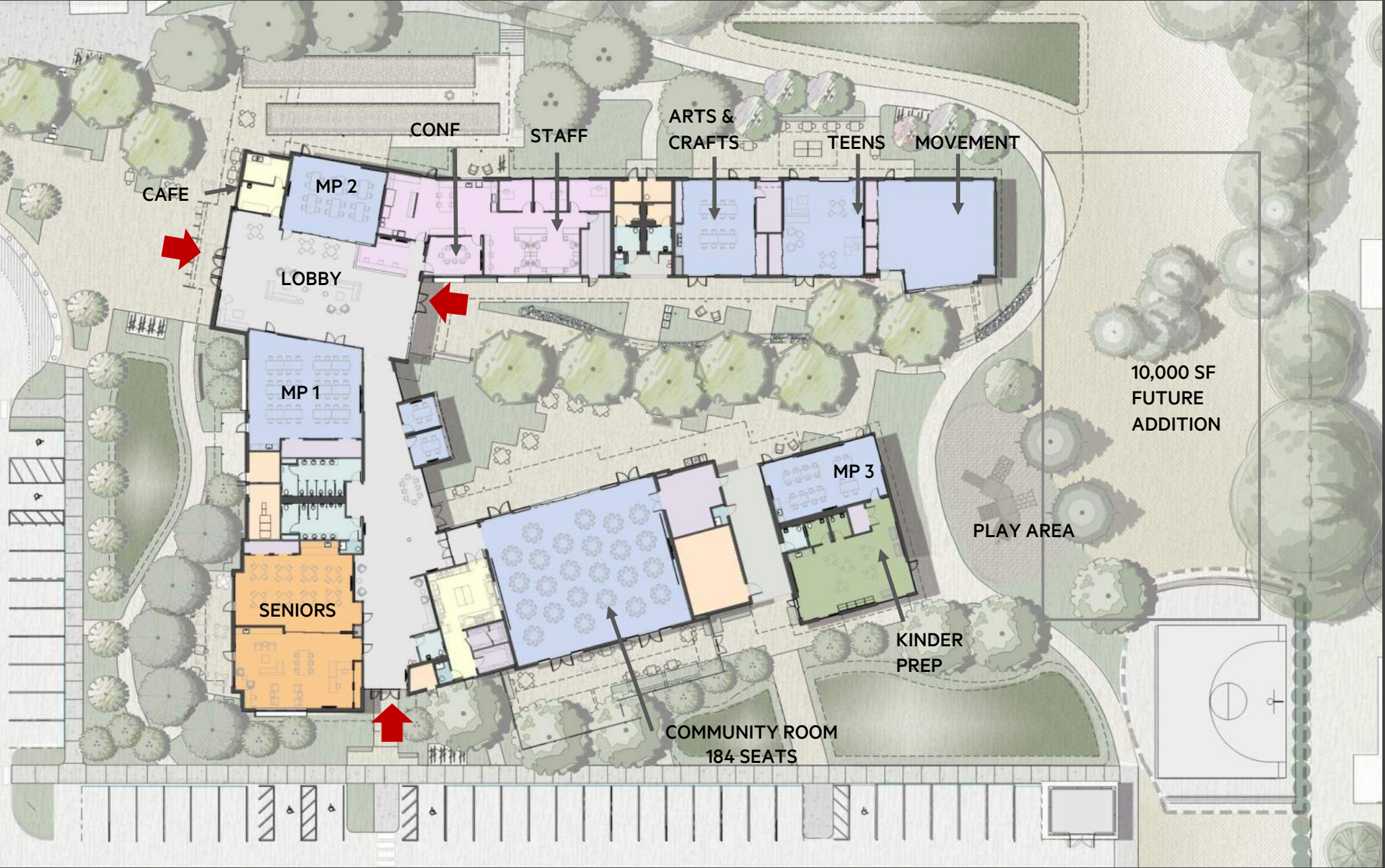
## LAWN



4,699 sf



24,500 SF



DESIGN DEVELOPMENT FLOOR PLAN





ROOF PLAN





AERIAL VIEW FROM HILLVIEW



ASPHALT  
SHINGLE  
ROOFING

NATURAL  
WOOD  
ACCENT  
WALLS

FIBER  
CEMENT  
PANELS

WINDOW  
GLAZING W/  
ALUMINUM  
FRAMES

STUCCO

NATURAL  
WOOD  
SOFFITS AND  
TRELLIS

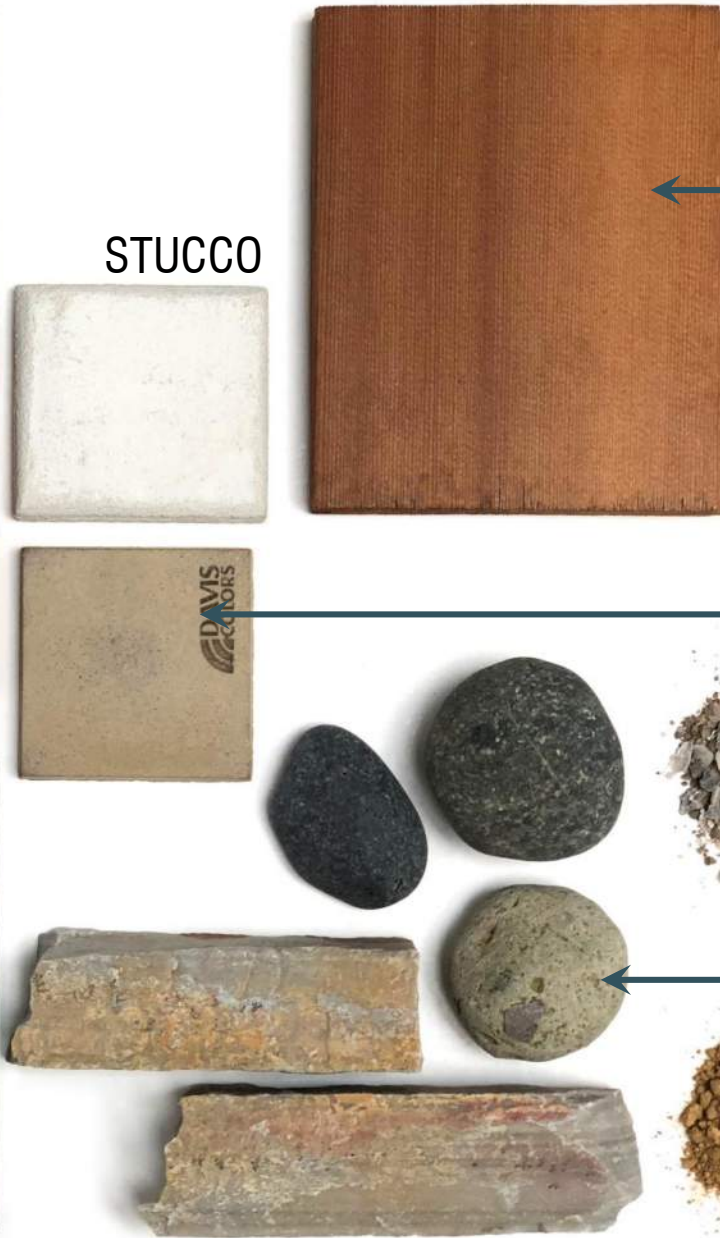
SCORED  
CONCRETE  
PLAZA  
PAVING

BOCCI COURT

COURTYARD  
RIVER ROCK

DG WALKING  
PATH

NATURAL STONE SITE WALLS







MAIN ENTRY FROM LIBRARY CONNECTION





MAIN ENTRY





MAIN ENTRY FROM LIBRARY CONNECTION





SOUTH ENTRY





CENTRAL COURTYARD, VIEW FROM LOBBY





CENTRAL COURTYARD, VIEW FROM EAST END





SAMPLE INTERIOR COLOR PALETTE





FLOOR & CEILING FINISHES





EXAMPLE FURNITURE





MAIN LOBBY





SOUTH LOBBY





COMMUNITY ROOM TOWARD KITCHEN



LEED GOLD EQUIVALENCY =  
60 POINTS REQUIRED

56 POINTS CONFIRMED YES  
4 POINTS - OPTIMIZING ENERGY  
60 POINTS CONFIRMED @ DD

+3 POINTS FOR PV PANELS  
63 POINTS

LEED SCORECARD

## Los Altos Hillview Community Center

LEED-NC v4 Equivalency Scorecard - Points as of 7/10/2018

56	14	4	38	Total Project Score	Certified 40-49 points	Silver 50-59 points	Gold 60-79 points	Platinum 80 or more points
Yes	Y	Y	No					
1				Credit 1 Integrative Process				
6	1		9	Location and Transportation 16 Points Possible				
1				Credit 2 Sensitive Land Protection	Previously Developed	1		
1		1		Credit 3 High Priority Site	Priority Designation	2		
2		3		Credit 4 Surrounding Density and Diverse Uses	Connectivity (8+)	5		
		5		Credit 5 Access to Quality Transit		5		
1				Credit 6 Bicycle Facilities		1		
	1			Credit 7 Reduced Parking Footprint	Dense Loc. 40% Reduction	1		
1				Credit 8 Green Vehicles		1		
9			1	Sustainable Sites 10 Points Possible				
Y				Prereq 1 Construction Activity Pollution Prevention		-		
1				Credit 1 Site Assessment		1		
2				Credit 2 Site Development - Protect or Restore Habitat	On-site restoration	2		
1				Credit 3 Open Space		1		
2		1		Credit 4 Rainwater Management	95th Percentile	3		
2				Credit 5 Heat Island Reduction	Roof & Non-roof	2		
1				Credit 6 Light Pollution Reduction		1		
6			5	Water Efficiency 11 Points Possible				
Y				Prereq 1 Outdoor Water Use Reduction, 30%		-		
Y				Prereq 2 Indoor Water Use Reduction, 20%		-		
Y				Prereq 3 Building-Level Water Metering		-		
1		1		Credit 1 Outdoor Water Use Reduction, 50% - 100%	Reduced 50%	2		
4		2		Credit 2 Indoor Water Use Reduction, 25% - 50%	Reduced 40%	6		
		2		Credit 3 Cooling Tower Water Use	---	2		
1				Credit 4 Water Metering		1		
15	6	1	11	Energy & Atmosphere 33 Points Possible				
Y				Prereq 1 Fundamental Commissioning and Verification		-		
Y				Prereq 2 Minimum Energy Performance		-		
Y				Prereq 3 Building-Level Energy Metering		-		
Y				Prereq 4 Fundamental Refrigerant Management		-		
3	1		2	Credit 1 Enhanced Commissioning	Enhanced Cx	6		
1	4		4	Credit 2 Optimize Energy Performance	New Const. Reduced 24%	18		
	1			Credit 3 Advanced Energy Metering		1		
		2		Credit 4 Demand Response	D.R.P. Available	2		
		3		Credit 5 Renewable Energy Production	1%, 5%, 10%	3		
		1		Credit 6 Enhanced Refrigerant Management		1		
2				Credit 7 Green Power and Carbon Offsets	100% Green Power	2		
2	3		8	Materials & Resources 13 Points Possible				
Y				Prereq 1 Storage & Collection of Recyclables		-		
Y				Prereq 2 Construction & Demolition Waste Mgmt. Planning		-		
		5		Credit 1 Building Life-Cycle Impact Reduction		5		
1		1		Credit 2 Building Products: EPD's	Opt 1 -20 EPD's	2		
	1	1		Credit 3 Building Products: Sourcing of Raw Materials	Opt 2 -Respons. Extraction	2		
	1	1		Credit 4 Building Products: Material Ingredients	Opt 1 -20 Disclosures	2		
1	1			Credit 5 Construction & Demolition Waste Management	Divert 75% & 4 streams	2		
9	3	3	1	Indoor Environmental Quality 16 Points Possible				
Y				Prereq 1 Minimum IAQ Performance		-		
Y				Prereq 2 Environmental Tobacco Smoke (ETS) Control		-		
2				Credit 1 Enhanced Indoor Air Quality Strategies		2		
1	1	1		Credit 2 Low-Emitting Interiors	Four Compliant Categories	3		
1				Credit 3 Construction Indoor Air Quality Management Plan		1		
1	1			Credit 4 Indoor Air Quality Assessment	Flush out - Before Occ.	2		
1				Credit 5 Thermal Comfort		1		
1		1		Credit 6 Interior Lighting	Lighting Control	2		
1	1	1	1	Credit 7 Daylight	Simulation: Illum. 75%	3		
1				Credit 8 Quality Views		1		
		1		Credit 9 Acoustic Performance		1		
6				Innovation & Design Process 6 Points Possible				
1				Credit 1.1 Exemplary Performance or Innovation: TBD		1		
1				Credit 1.2 Innovation: Low Mercury Lighting		1		
1				Credit 1.3 Innovation: Green Building Education		1		
1				Credit 1.4 Innovation: Green O+M Policies		1		
1				Credit 1.5 Pilot Credit: Social Equity		1		
1				Credit 2 LEED™ Accredited Professional		1		
2	1		3	Regional Credits 4 Points Possible				
	94022			zla code				
		1		Credit 1.1 Regional Credit: Access to Quality Transit, 5 points		1		
		1		Credit 1.2 Regional Credit: Rainwater Management, 98th Percentile		1		
		1		Credit 1.3 Regional Credit: Outdoor Water Use Reduction, 100%		1		
1				Credit 1.4 Regional Credit: Indoor Water Use Reduction, 40%		1		
1				Credit 1.5 Regional Credit: Optimize Energy Performance, 24%		1		
	1			Credit 1.6 Regional Credit: BPDO Sourcing of Raw Materials		1		



## Site Considerations



- **Bicycle Facilities**
  - Long-term bike rack spaces required for 5% of FTE employees
  - Short-term bike rack spaces required for 5% of visitors
- **Reduced Parking and Green Vehicles**
  - Provide Clean Air Vehicle spaces for 10% of total parking (to meet both LEED and CalGreen requirements)
  - LEED: EV chargers for 2% of total parking
  - CalGreen: Future EV supply equipment for 3% of spaces

## Indoor Water Use Reduction

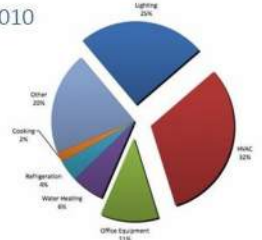


- **Required 20% Reduction; Targeting 35%-40%**
- **Eligible fixtures must be WaterSense labeled**
  - Toilets, urinals, showerheads, private lavatory faucets
- **Target low-flow fixtures:**
  - Water Closets (1.1 gpf or dual-flush)
  - Urinals (0.125 gpf)
  - Lavatory Faucets (0.35 gpm)
  - Kitchen break sinks (1.0-1.5 gpm)

## Energy Considerations



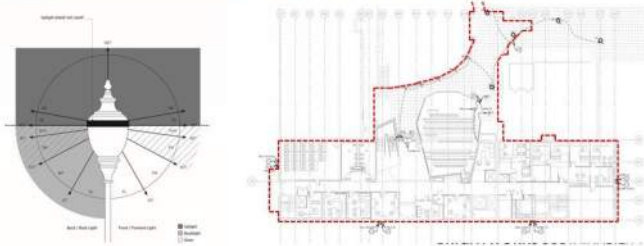
- **Energy Performance**
  - Required: 2% improvement over ASHRAE 90.1-2010
  - Targeting: 20-24% energy cost savings, potential 1-10% offset through renewables
- **Enhanced Refrigerant Management**
  - What are HVAC system refrigerant impacts?
  - Food service equipment considerations
- **Advanced Energy Metering**
  - Submeter any individual end uses representing 10% or more of the total annual consumption
  - Interior lighting, Exterior lighting, heating, cooling, plug loads, etc.



## Light Pollution Reduction



- No photometric analysis required
- Simplified Backlight, Uplight, and Glare (BUG) ratings compliance option aligns with CALGreen Mandatory Measure 5.106.8
- Prescriptive approach using BUG rating, mounting height, and distance of exterior light fixture to lighting boundary



## Thermal and Lighting Controls



- **Thermal Comfort and Controllability**
  - Meet requirements of ASHRAE 55-2010 for thermal comfort
  - Provide individual thermal comfort controls for at least 50% of individual occupant spaces. Provide group thermal comfort controls for all shared multi-occupant spaces
  - Controls allow users to adjust one of the following: air temperature, radiant temperature, air speed, and humidity.
- **Lighting Control**
  - For 90% of individual occupant spaces provide adjustable, 3-level lighting (on, off, 30%-70% midlevel)
  - For ALL shared multi-occupant spaces provide multi-zone control system with adjustable, 3-level lighting

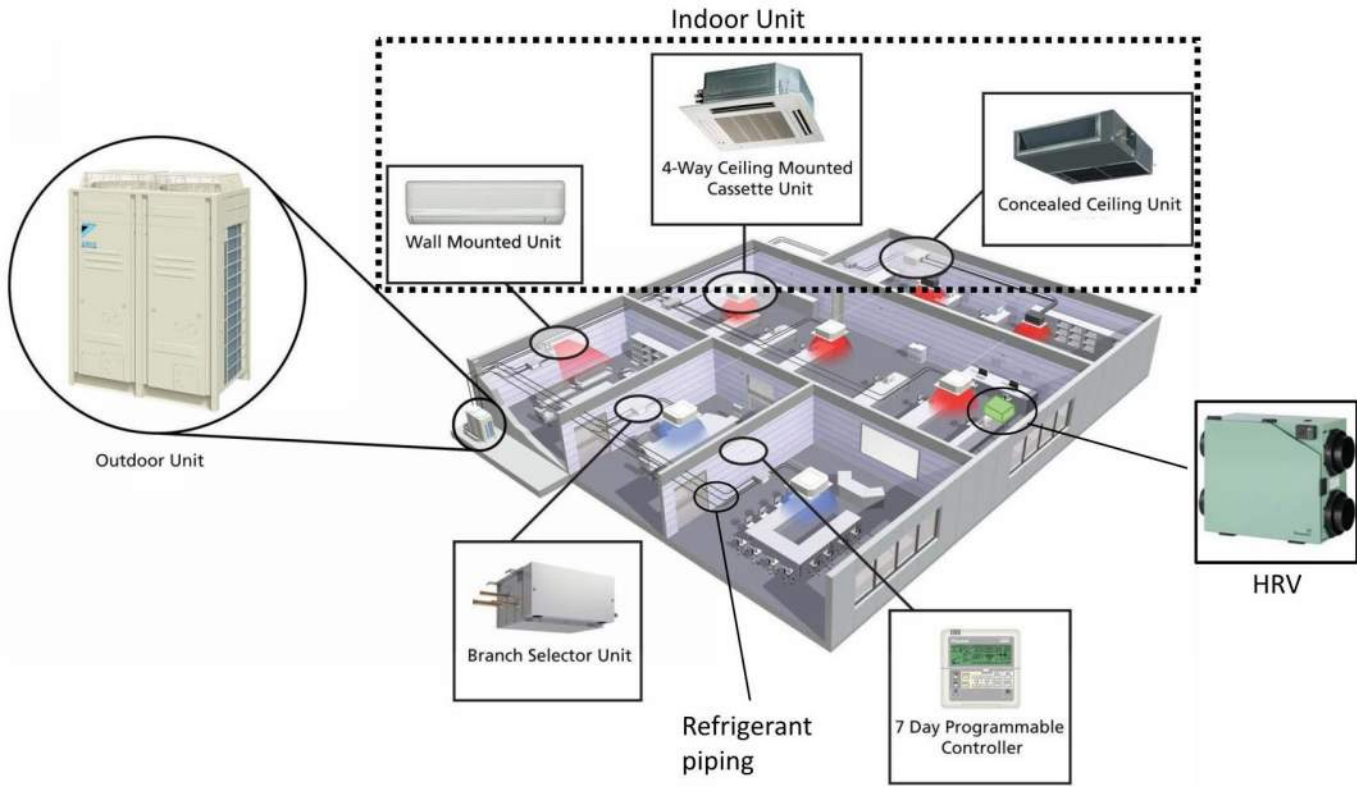
## Construction Practices



- **Construction waste management**
  - Divert 50% or 75% of C&D waste from landfill
  - On-site sorting for 4 separate waste streams
  - Alternate option: generate maximum of 2.5 lb waste per building sf
- **Construction IAQ management**
  - IAQ management plan + SMACNA photo documentation
  - Building flush-out or air quality testing
- **Low-emitting interiors and emissions standards**
  - Adhesives, paints, sealants, coatings (do not exceed VOC content)
  - Flooring systems and composite wood products
  - Ceilings, wall systems, thermal and acoustical insulation



# VRF Air Cooled Systems + HRV/ERV



# MECHANICAL SYSTEM/OPTIMIZE ENERGY

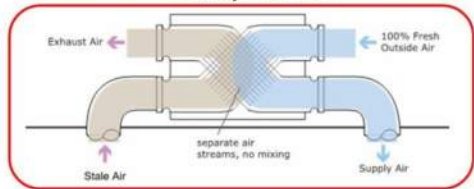
## Mechanical System Options Matrix

	ENERGY / CARBON	FIRST COST	ONGOING COST	MAINTENANCE	ALL ELECTRIC POTENTIAL?	COMFORT
<b>OPTION 1:</b> VRF + DOAS	$\nearrow$	\$	\$	✖ ✖	YES	👍 👍
<b>OPTION 2:</b> Typical System: Package Units	$\nearrow \nearrow \nearrow$	\$	\$\$	✖ ✖	NO	👍

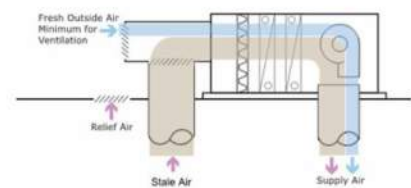
## DEDICATED OUTSIDE AIR SYSTEM (DOAS)

More air ≠ Better Indoor Air Quality

Ventilation separate from heating & cooling:  
"Decoupled HVAC"



Traditional air-based system



\* Understanding and Designing Dedicated Outdoor Air Systems (DOAS), Penn State, 2014

**Inherent Problems with VAV Systems\*:**

- Poor air distribution
- Poor humidity control
- Poor acoustical properties
- Poor use of plenum and mechanical shaft space
- Serious control problems, particularly with tracking return fan systems
- Poor energy transport medium: air
- **Poor and unpredictable ventilation performance**

imagine | accelerate | perform | sustain

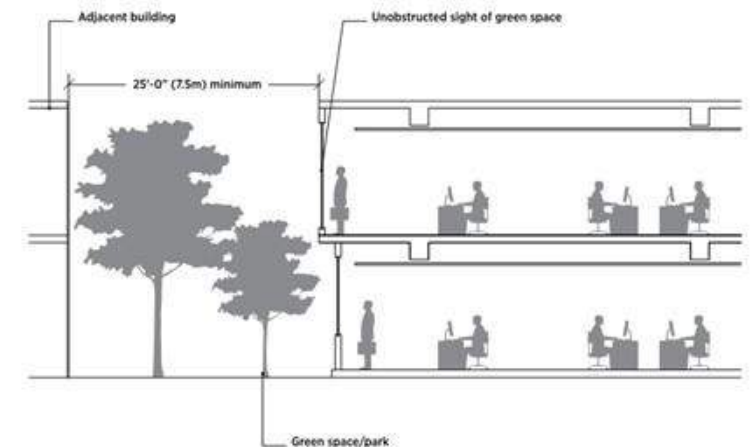
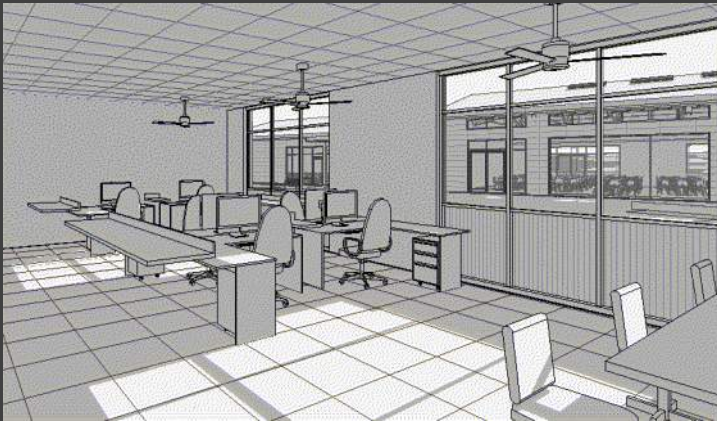
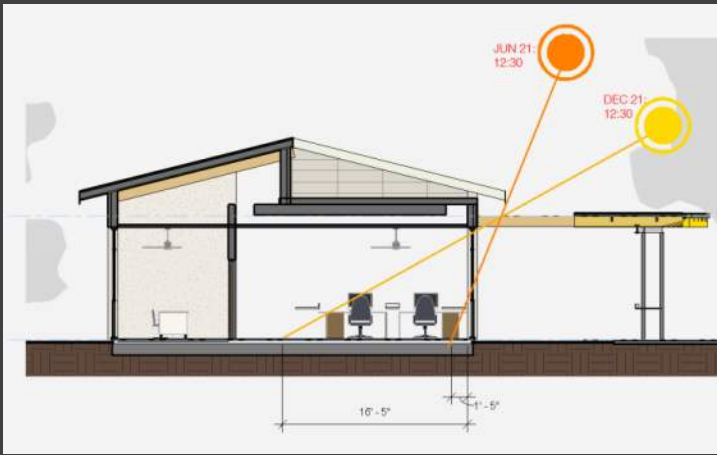
INTEGRAL  
Revolutionary Engineering



# Daylight and Views



- Daylight for 55%, 75%, 90% of regularly occ. spaces
  - Option 1: Simulation – spatial daylight autonomy
  - Option 2: Simulation – illuminance calculations
  - Option 3: Measurement
  - Requires blinds (manual or auto) in all occupied spaces
- Quality views for 75% of regularly occupied spaces
  - View of outdoors (flora/fauna)
  - Window transparency
  - Proximity to windows
  - Multiple lines of sight
  - Distance of outside objects



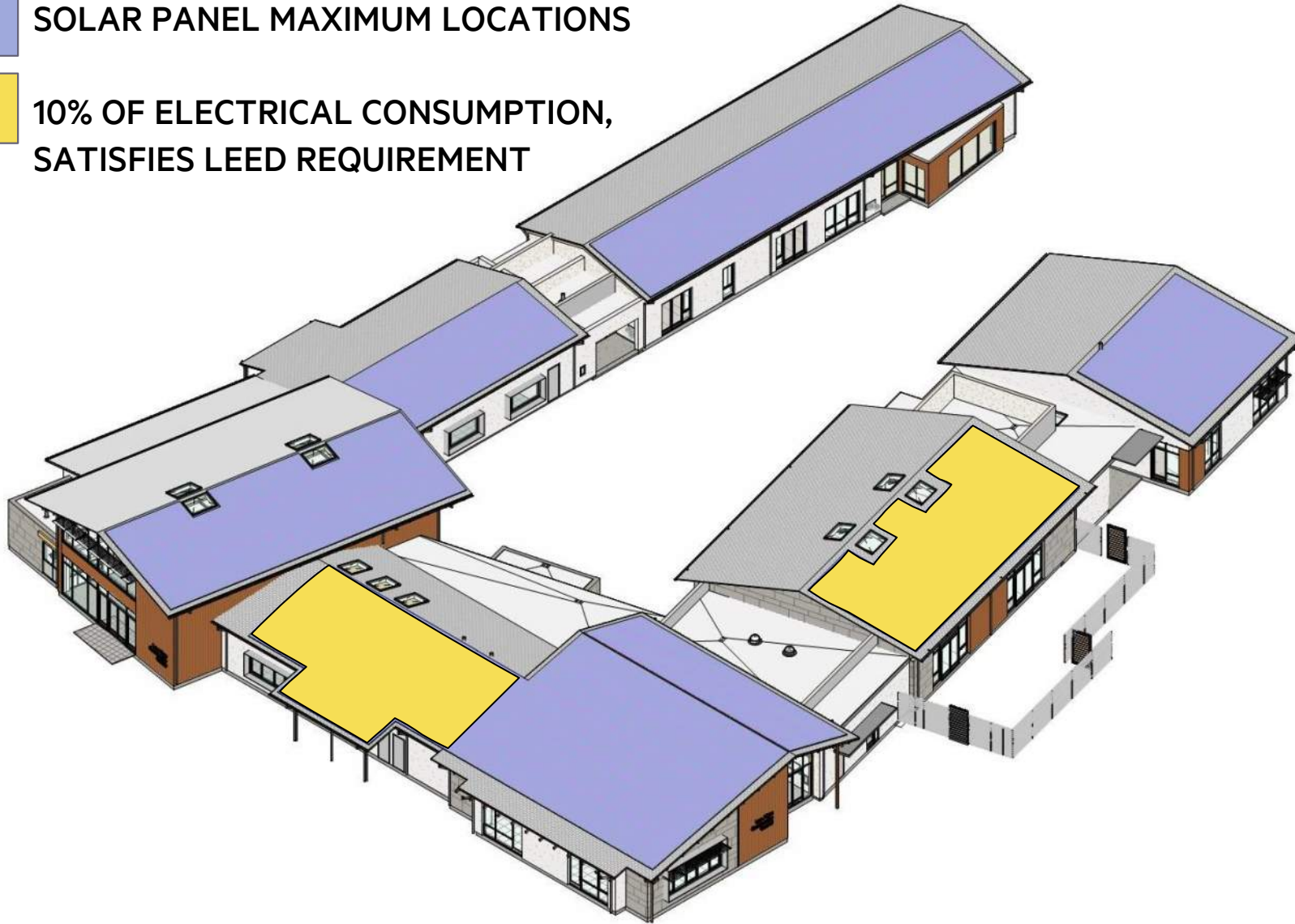




**SOLAR PANEL MAXIMUM LOCATIONS**



**10% OF ELECTRICAL CONSUMPTION,  
SATISFIES LEED REQUIREMENT**



**MAXIMUM ROOF AREA  
FOR PV PANELS -  
APPROX 11,500 SF**

**CAN PROVIDE 60-90%  
OF THE ESTIMATED  
ELECTRICAL LOADS**

**ALL ELECTRIC  
BUILDING**

**COST:  
10% = \$130K  
MAX = \$1.2M**

**RENEWABLE ENERGY: PHOTO-VOLTAICS**



## **COUNCIL ACTION:**

- **Adopt the Mitigated Negative Declaration**
  - **Approve Design Review application 18-D-05  
for the new Los Altos Community Center**
-



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**CITY COUNCIL MEETING**  
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